

AMENDMENT TO THE CLAIMS:

Please amend the claims as follows:

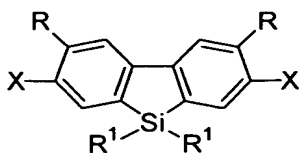
1. (Original) A polymer comprising an optionally substituted repeat unit of formula (I):



(I)

wherein each R is the same or different and represents H or an electron withdrawing group; and each R¹ is the same or different and represents a substituent.

2. (Currently Amended) A polymer according to claim 1 wherein at least one R¹ is a ~~solubilising~~ solubilizing group.
3. (Currently Amended) A polymer according to claim 1 ~~or 2~~ wherein each R¹ is the same or different and is independently selected from the group consisting of optionally substituted C₁₋₂₀ alkyl, C₁₋₂₀ alkoxy, aryl and heteroaryl groups.
4. (Currently Amended) A polymer according to ~~any preceding~~ claim 1 comprising an optionally substituted aryl or heteroaryl second repeat unit.
5. (Currently Amended) A monomer comprising a repeat unit of formula (II):



(II)

wherein ~~R and R1 are as defined in any one of claims 1-3~~ each R is the same or different and represents H or an electron withdrawing group; and each R¹ is the same or different and represents a substituent and each X independently represents a ~~polymerisable~~ polymerizable group.

6. (Currently Amended) A monomer according to claim 5 wherein each X is the same or different and is selected from the group consisting of boronic acid groups, boronic ester groups, borane groups, and halide functional groups.

7. (Currently Amended) A method of forming a polymer comprising the step of ~~polymerising~~ polymerizing a monomer according to claim 5 ~~or 6~~.

8. (Currently Amended) A method according to claim 7 wherein each X is the same or different and is a halide functional group, and comprising performing the ~~polymerisation~~ polymerization ~~is performed~~ in the presence of a nickel complex catalyst.

9. (Currently Amended) A method according to claim 7 comprising the step of ~~polymerising~~ polymerizing:

(a) a monomer of formula (II) wherein each X is a boron the same or different and is a boron derivative functional group selected from ~~[[a]]~~ the group consisting of boronic acid, ~~[[a]] boronic ester~~ esters, and ~~[[a]] borane~~ boranes, and an aromatic monomer having at least two reactive halide functional groups; or

(b) a monomer of formula (II) wherein each X is the same or different and is a reactive halide functional group, and an aromatic monomer having at least two boron derivative functional group selected from ~~[[a]]~~ the group consisting of boronic acid, ~~[[a]]~~ boronic ester esters, and ~~[[a]]~~ borane boranes; or

(c) a monomer of formula (II) wherein one X is a reactive halide functional group and the other X is a boron derivative functional group selected from ~~[[a]]~~ the group consisting of boronic acid, ~~[[a]]~~ boronic ester esters, and ~~[[a]]~~ borane boranes,

wherein the reaction mixture comprises a catalytic amount of a palladium catalyst suitable for ~~catalysing~~ catalyzing the ~~polymerisation~~ polymerization of the aromatic monomers, and a base in an amount sufficient to convert the boron derivative functional groups into boronate anionic groups.

10. (Currently Amended) An optical device comprising a polymer according to ~~any one of claims 1-4~~ claim 1.

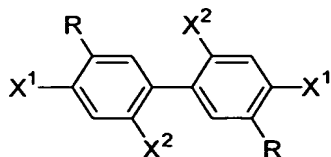
11. (Currently Amended) An optical device according to claim 10 comprising an anode, a cathode and a layer of the polymer ~~according any one of claims 1-4 located~~ disposed between the anode and the cathode.

12. (Currently Amended) An optical device according to claim 11 ~~that is~~ comprising an electroluminescent device.

13. (Currently Amended) A switching device comprising a polymer according to ~~any one of claims 1-4~~ claim 1.

14. (Currently Amended) A switching device according to claim 13 ~~that is~~ comprising a thin film transistor.

15. (Currently Amended) An optionally substituted compound of formula (IV):

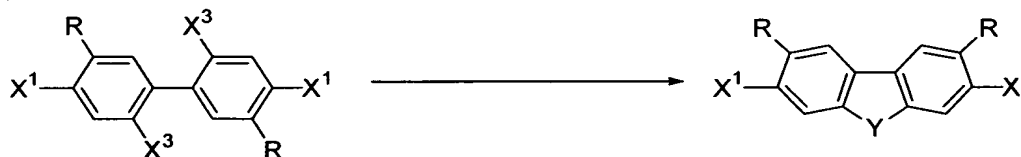


(IV)

wherein R is ~~as defined in any one of claims 1-3~~ the same or different and represents H or an electron withdrawing group; each X¹ and each X² are the same or different and represent a leaving group capable of participating in a transmetallation reaction and X² has an electronegativity less than that of X¹.

16. (Currently Amended) ~~Preferably,~~ The compound of claim 15, wherein each X¹ and X² is independently a halogen.

17. (Currently Amended) A method of forming a monomer of formula (VI) from a compound of formula (V) according to the following scheme::



(V)

(VI)

wherein the method comprises reacting the compound of formula (V) with a transmetallating agent followed by reaction with a compound of formula LG-Y-LG, wherein X¹ is a leaving group capable of participating in a transmetallation reaction and R ~~are as defined in claim 15~~ is H or an electron withdrawing group; each X³ is the same or different

and represents a leaving group capable of participating in a transmetallation having an electronegativity less than or the same as that of X^1 ; Y represents a divalent residue comprising a backbone of 1-3 atoms; and each LG is the same or different and represents a leaving group.

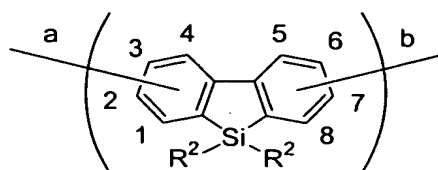
18. (Currently Amended) A method according to claim 17 wherein Y comprises a single atom in its backbone selected from the group consisting of $-CR^3_2-$, $-SiR^3_2-$, $-NR^3-$, $-PR^3-$, $-GeR^3_2-$, $-SnR^3_2-$, O_2 and S, wherein R^3 is selected from the group consisting of optionally substituted alkyl, alkoxy, aryl, and heteroaryl.

19. (Currently Amended) A method according to claim 17 ~~or 18~~ wherein each X^3 is the same or different and has an electronegativity less than that of X^1 .

20. (Currently Amended) A method according to ~~any one of claims 17-19~~ claim 17 wherein each LG is the same or different and is a halogen.

21. (Currently Amended) A method according to ~~any one of claims 17-20~~ claim 17 wherein the transmetallating agent is a compound of formula R^4-M wherein R^4 is alkyl or aryl and M is a metal.

22. (Original) A polymer comprising an optionally substituted first repeat unit of formula (VII):



(VII)

wherein each R^2 is the same or different and represents a substituent; the R^2 groups may be linked to form a ring; and bond (a) is not linked to the 2-position of the repeat unit of formula (VII).

23. (Original) A polymer according to claim 22 wherein bond (b) is not bound to the 7-position of the repeat unit of formula (VII).

24. (Currently Amended) A polymer according to claim 22 ~~or 23~~ wherein bond (a) is bound to the 3-position of the repeat unit of formula (VII).

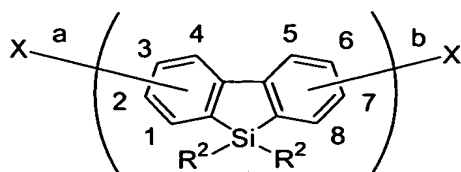
25. (Currently Amended) A polymer according to ~~any one of claims 22-24~~ claim 22 wherein bond (b) is bound to the 6-position of the repeat unit of formula (VII).

26. (Currently Amended) A polymer according to ~~any one of claims 22-25~~ claim 22 wherein at least one R^2 is a solubilising group.

27. (Currently Amended) A polymer according to ~~any one of claims 22-26~~ claim 22 wherein each R^2 is the same or different and is selected from the group consisting of optionally substituted C_{1-20} alkyl, C_{1-20} alkoxy, aryl and heteroaryl, ~~preferably a C_{4-10} alkyl, more preferably n-hexyl or n-octyl.~~

28. (Currently Amended) A polymer according to ~~any one of claims 22-27~~ claim 22 wherein the polymer comprises an optionally substituted aryl or heteroaryl second repeat unit.

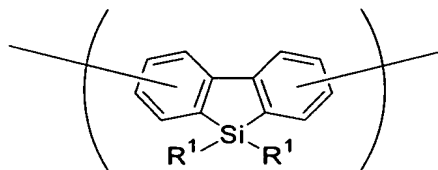
29. (Currently Amended) An optionally substituted monomer of formula (VIII):



(VIII)

wherein each R^2 is ~~as defined in claim 22, 26, or 27~~ the same or different and represents a substituent; each X is ~~as defined in claim 5 or 6~~ independently represents a polymerizable group and at least one X is not linked to the 2-position of the repeat unit of formula (VIII).

30. (Currently Amended) An electroluminescent device comprising an anode, a cathode and an electroluminescent layer located between the anode and cathode wherein the electroluminescent layer comprises a polymeric host material comprising an optionally substituted first repeat unit of formula (IX) and a luminescent dopant



(IX)

wherein R^1 is ~~as defined in any one of claims 1-3~~ the same or different and represents a substituent.

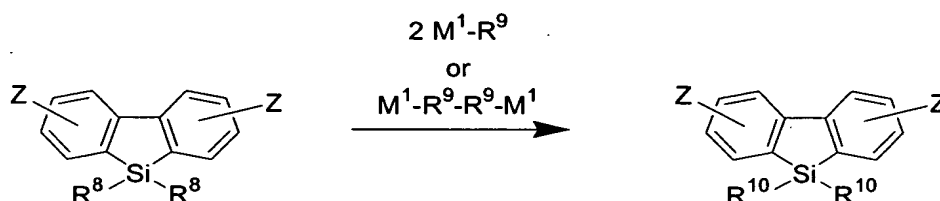
31. (Original) An electroluminescent device according to claim 30 wherein the repeat unit of formula (IX) is linked through its 3- and 6- positions.

32. (Original) An electroluminescent device according to claim 30 ~~or 31~~ wherein the polymeric host material comprises a second repeat unit

33. (Original) An electroluminescent device according to ~~any one of claims 30-32~~ claim 30 wherein the second repeat unit comprises a hole transporting material.

34. (Original) An electroluminescent device according to ~~any one of claims 30-33~~ claim 30 wherein the luminescent dopant is phosphorescent.

35. (Original) A method of forming an optionally substituted compound of formula (X) according to the following process:



(X)

wherein each R⁸ is independently selected from the group consisting of C₁₋₂₀ alkyl and aryl; each R⁹ is different from R⁸ and is independently selected from the group consisting of C₁₋₂₀ alkyl, aryl and heteroaryl; M¹ is a metal; and Z is a reactive group capable of undergoing reaction with M¹-R⁹.

36. (Original) A method according to claim 35 wherein M¹ is lithium.

37. (Currently Amended) A method according to claim 35 wherein R⁸ is methyl.

38. (Currently Amended) A method according to claim 35 wherein Z is trialkylsilyl, ~~more preferably trimethylsilyl.~~

39. (Original) A method according to claim 35 wherein, in the case of reaction with M^1-R^9 , the two groups R^{10} are not linked to form a ring.
40. (New) A polymer according to claim 22, wherein R^2 is a C_{4-10} alkyl group.
41. (New) A polymer according to claim 40, wherein R^2 is a m-hexyl group or an n-octyl group.
42. (New) As method according to claim 35, wherein Z is trimethylsilyl.